

CLAIMS

1. A bed foundation, comprising:
 - 2 a rectangular top panel having opposite sides, opposite ends, and
four corners;
 - 4 a pair of side panels and a pair of end panels depending
downwardly from opposite sides and ends of the top panel, respectively,
6 to form a box-like enclosure having an open lower end;
a corner support at each corner of the enclosure, each corner
8 support having a lower face and a bore extending upwardly from the
lower face of the corner support for receiving the end of a support leg for
10 supporting the enclosure at a position raised above a floor surface; and
the panels and corner supports being of expanded rigid plastic foam
12 material.
2. The foundation as claimed in claim 1, wherein the top panel, side
2 panels, end panels and corner supports are formed integrally in one piece.
3. The foundation as claimed in claim 1, wherein the top panel, side
2 panels, end panels and corner supports are formed separately.
4. The foundation as claimed in claim 3, including securing devices for
2 securing the top, side and end panels and corner supports together to
form said box-like enclosure.
5. The foundation as claimed in claim 1, wherein at least one cross brace
2 extends between the side panels.

- 2 6. The foundation as claimed in claim 5, including a leg mounting block
secured to said cross brace, the leg mounting block having a downwardly
facing mounting bore for mounting an additional support leg.
- 2 7. The foundation as claimed in claim 1, wherein the side panels each
have at least one opening.
- 2 8. The foundation as claimed in claim 7, wherein the openings are
rectangular.
- 2 9. The foundation as claimed in claim 7, wherein the openings are
circular.
- 2 10. The foundation as claimed in claim 7, wherein the openings extend
over at least 50% of the total surface area of the respective panel.
- 2 11. The foundation as claimed in claim 1, wherein one end panel has
horizontal slots for mounting of a head board.
- 2 12. The foundation as claimed in claim 1, wherein the expanded rigid
plastic foam material is selected from the group consisting of phenolic,
urethane, and poly-isocyanate rigid foam.
- 2 13. The foundation as claimed in claim 12, wherein the foam is of the
closed cell variety.
- 2 14. The foundation as claimed in claim 12, wherein the foam has a
density in the range from 5 to 20 pounds per cubic foot.

15. The foundation as claimed in claim 1, wherein the top panel has a
2 lower layer of the same foam material as the side and end walls, and an
upper layer, the upper layer comprising a flexible foam layer.

16. A bed foundation, comprising:
2 a rectangular panel of expanded rigid plastic foam material, the
panel having an upper face, opposite sides, opposite ends, and four
4 corners;
each corner having a lower face and a bore extending upwardly
6 from the lower face; and
a support leg mounted in the bore at each corner of the panel for
8 supporting the panel at a spacing above a floor surface.

17. The foundation as claimed in claim 16, further comprising a plurality
2 of springs secured to the upper surface of the panel, and a cover
enclosing the springs.

18. The foundation as claimed in claim 16, wherein the panel is of
2 uniform thickness and has flat upper and lower faces.

19. The foundation as claimed in claim 16, wherein the panel has a lower
2 face having a plurality of recesses.

20. The foundation as claimed in claim 19, wherein the recesses are
2 rectangular recesses extending parallel to the ends of the panel.

21. The foundation as claimed in claim 16, further comprising a pair of
2 side panels and a pair of end panels depending downwardly from opposite

4 sides and ends of the rectangular panel, respectively, to form a box-like enclosure having an open lower end.

2 22. The foundation as claimed in claim 16, wherein the expanded rigid plastic foam material is selected from the group consisting of phenolic, urethane, and poly-isocyanate rigid foam.

2 23. The foundation as claimed in claim 22, wherein the foam is of the closed cell variety.